

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.nspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/927,183	08/10/2001	Oludele Olusegun Popoola	198-1162	5329	
75	90 08/07/2003				
Daniel H. Bliss Bliss McGlynn & Nolan, P.C. Suite 600 2075 West Big Beaver Road Troy, MI 48084			EXAMINER		
			FERGUSON, LAWRENCE D		
			ART UNIT	PAPER NUMBER	
,,		•	1774	5	
			DATE MAILED: 08/07/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

						A
			Applica	ation N .	Applicant(s)	
Offic	Action Summary	09/927	,183	POPOOLA ET AL.		
		Examin	r	Art Unit		
	ho MAU	INO DATE CO.	Lawren	ce D Ferguson	1774	
Period for R	ne <i>MAIL</i> eply	ING DATE of this communication	nappears ni	the cover sheet with th	correspondence addres	is
- Extensions after SIX (- If the perioder of	of time m b) MONTH d for reply d for reply eply within eceived by	STATUTORY PERIOD FOR REATE OF THIS COMMUNICATION ay be available under the provisions of 37 CF S from the mailing date of this communication specified above is less than thirty (30) days, as is specified above, the maximum statutory per the set or extended period for reply will, by state of the Coffice later than three months after the mature of the communication	JN. FR 1.136(a). In no n. a reply within the si eriod will apply and	event, however, may a reply be tatutory minimum of thirty (30) will expire.SIX (6) MONTHS for	e timely filed days will be considered timely. com the mailing date of this commu	nication.
_	enonei	10 to communication (a) Elad	45.14			
· <u> </u>		ve to communication(s) filed on				
· —			This action i			
3) Sir	000 111 0	application is in condition for all accordance with the practice und is	lowance exce der <i>Ex parte</i>	ept for formal matters, Q <i>uayl</i> e, 1935 C.D. 11	prosecution as to the me, 453 O.G. 213.	erits is
4)⊠ Clai	m(s) <u>1</u>	.2,5 and 7 is/are pending in the a	application.			
		bove claim(s) is/are with	•	onsideration		
		is/are allowed.		and and an		
		2,5 and 7 is/are rejected.				
		is/are objected to.		•		
		are subject to restriction and	d/or election	requirement		
Application P	apers			roquii ciriciit.	•	
9)☐ The s	specifica	ation is objected to by the Exam	iner.			
10)☐ The o	Irawing	(s) filed on is/are: a)□ ac	cepted or b)	objected to by the Ex	aminer.	
App	olicant m	nay not request that any objection to	the drawing(s) be held in abeyance.	See 37 CFR 1.85(a)	•
11)☐ The p	ropose	d drawing correction filed on			roved by the Examiner.	
If a	oproved,	corrected drawings are required in	reply to this O	ffice action.	, =	
12)☐ The c	ath or d	declaration is objected to by the	Examiner.			
Priority under	35 U.S	i.C. §§ 119 and 120				
13) Ackr	owledg	ment is made of a claim for fore	ign priority ur	nder 35 U.S.C. § 1190	a)-(d) or (f)	
a)∐ All	b)[Some * c)☐ None of:		,• .	, (, , , , , , , , , , , , , , , , , ,	
1.	Certifi	ed copies of the priority docume	ents have bee	en received.		
2.	Certifi	ed copies of the priority docume	ents have bee	en received in Applica	tion No	
3	Copie: ap	s of the certified copies of the proplem of the proplem of the proplem of the international F	riority docume	ents have been receiv	ed in this National Stage	•
See th	e attacr	ied detailed Office action for a lis	st of the certi	fied copies not receive	ed.	
14) ACKNO	vledgm	ent is made of a claim for domes	stic priority ur	nder 35 U.S.C. § 119(e) (to a provisional appli	cation).
13) ACKITO	he tran: wledgm	slation of the foreign language p ent is made of a claim for dome	orovisional ap estic priority u	plication has been red nder 35 U.S.C. §§ 120	ceived. O and/or 121.	
ttachment(s)	·	.				
) [] Information [iftspersor Disclosure	Cited (PTO-892) o's Patent Drawing Review (PTO-948) o Statement(s) (PTO-1449) Paper No(s)	··	4) Interview Summar 5) Notice of Informal 6) Other:	y (PTO-413) Paper No(s) Patent Application (PTO-152)	
Patent and Trademark 0 0-326 (Rev. 04-01	Office)	Office A	Action Summar	y	Part of Paper No. 5	
				•	· with or rapper IND. 5	



Art Unit: 1774

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment mailed May 15, 2003. Claims 3-4 and 6 were canceled and claims 1-2, 5 and 7 were amended rendering claims 1-2, 5 and 7 pending.

Claim Rejections - 35 USC § 102(b)

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-2, 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Longo et al (US 3,723,165).
- 4. Longo discloses a thermally sprayed article (flame spraying) used for applying metal and plastic coatings (column 1, lines 7-49) where the plastics include polymers (column 1, lines 65-68). Longo discloses a metal substrate material can be thermally sprayed on the article to form an inner layer (column 3, lines 54-60) where the sprayed coating forms the outer layer. Longo discloses the mixture of plastic powder and metal are co-deposited (column 2, lines 46-60) where the bond coat has a thickness of 0.005 inches and the top coat has a thickness of 0.001 inches (column 4, lines 15-20) resulting in the hardness of the outer layer being less than that of the

Art Unit: 1774

inner layer. This would be inherent, because the plastic/metal mixture would be softer than the base metal alone.

Response to Arguments

5. Rejection made under 35 U.S.C. 112, second paragraph has been withdrawn due to Applicant's canceling claim 3. Rejection made under 35 U.S.C. 103(a) as being unpatentable over Godel (US 5,829,405) in view of JP 60190497 has been withdrawn due to Applicant's amending claim 1 and canceling claims 3-4 and 6.

Applicant's arguments to rejection made under 35 USC 102(b) as being anticipated by Longo et al (US 3,723,165) has been considered but is unpersuasive. Applicant argues Longo et al. does not disclose an article substrate, an inner layer formed on the article substrate of a metal material having a first predetermined thickness, an outer layer formed on the inner layer of a composite made of a polymer and the metal material having a second predetermined thickness. Examiner is not persuaded by this argument because Longo discloses a metal substrate material can be thermally sprayed on the article to form an inner layer (column 3, lines 54-60) where the sprayed coating forms the outer layer. Longo discloses the mixture of plastic powder and metal are co-deposited (column 2, lines 46-60) where the bond coat has a thickness of 0.005 inches and the top coat has a thickness of 0.001 inches (column 4, lines 15-20) resulting in the hardness of the outer layer being less than that of the inner layer. Applicant states that claim 2 has been amended similar to claim 1 and includes the feature of the second predetermined thickness being less than the first predetermined thickness. As previously stated, Longo discloses the bond coat

Art Unit: 1774

has a thickness of 0.005 inches and the top coat has a thickness of 0.001 inches (column 4, lines 15-20) resulting in the hardness of the outer layer being less than that of the inner layer. Applicant recites In re Arkley, where anticipation requires the presence of a single prior art reference, which discloses each and every element of the claimed invention arranged as in the claim. Examiner contends the reference Longo et al. anticipates claims 1,2,5 and 7. Applicant reiterates that Longo et al. lacks an article substrate, an inner layer formed on the article substrate of a metal material having a first predetermined thickness, an outer layer formed on the inner layer of a composite made of a polymer and the metal material having a second predetermined thickness. Examiner respectfully disagrees because Longo discloses a metal substrate material can be thermally sprayed on the article to form an inner layer (column 3, lines 54-60) where the sprayed coating forms the outer layer. Longo discloses the mixture of plastic powder and metal are co-deposited (column 2, lines 46-60) where the bond coat has a thickness of 0.005 inches and the top coat has a thickness of 0.001 inches (column 4, lines 15-20) resulting in the hardness of the outer layer being less than that of the inner layer. Applicant argues Longo et al. does not disclose thermally spraying a metal material against an article substrate. Examiner is not persuaded by this argument because Longo discloses a thermally sprayed article (flame spraying) used for applying metal and plastic coatings (column 1, lines 7-49) where the plastics include polymers (column 1, lines 65-68). Longo discloses a metal substrate material can be thermally sprayed on the article to form an inner layer (column 3, lines 54-60) where the sprayed coating forms the outer layer.

Art Unit: 1774

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Funk (U.S. 5,897,947) discloses a thermally sprayed article (column 3, lines 6-7).

Page 5

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is (703) 305-9978. The examiner can normally be reached on Monday through Friday 8:30 AM – 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. Please allow the examiner twenty-four hours to return your call.

Art Unit: 1774

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.

Ĺawrence D. Ferguson

Examiner Art Unit 1774 CYNTHIA H. KELLY SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1700

CystHelf